

CLAIMS

1. A FED control circuit for controlling an electrode voltage of a field emission display which includes a plurality of cathode electrodes and gate electrodes, both of which being arranged in lattice shape; emitters, each of which being arranged at an intersection point of said cathode electrode and said gate electrode; fluorescent materials and anode electrodes, both of which being disposed opposing to said cathode electrode, said FED control circuit comprising:

a cathode voltage control unit for controlling said cathode electrode so that electron emission from said cathode electrode is uniform; and
a gate electrode driving unit for changing a gate electrode voltage in response to a video signal.

2. The FED control circuit according to claim 1, wherein said cathode voltage control unit charges a capacitor by a constant current and determines a cathode voltage of each pixel by controlling charging time.

3. The FED control circuit according to claim 2, wherein said charging time of said capacitor is controlled by pulse width.

4. The FED control circuit according to any one of claims 1 to 3, wherein said gate electrode driving unit performs ON/OFF control of said gate electrode by complementary connection.

5. The FED control circuit according to any one of claims 1 to 4, further comprising a characteristics correction unit which continuously corrects variation for every said gate electrode by a data table.